

Impact of Reading Focus Cards on Fluency and Comprehension of Secondary Students
with Disabilities

by

April Godwin

Presented to:
Richard Staley, Ph.D.
University of Missouri Saint Louis
EDREM 6040

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Abstract

There are many products and programs that suggest they will increase reading skills. The researcher will test a product known as the Reading Focus Cards, a product made by Brennan Innovators LLC. (Brennan, 2010). The purpose of the study is to determine if Reading Focus Cards will significantly increase reading fluency and comprehension in secondary students with disabilities. This study will take place at a rural high school located in central Missouri. The students involved in this study are 15 to 18 years old in 10th, 11th, or 12th grade, and enrolled in Reward Reading. This reading class is a remedial class for students with various disabilities, who are currently receiving special education services. The areas measured in this project include, comprehension, decoding, and fluency. Timed Readings were administered to determine the increase in fluency, measuring correct words per minute. On average, the subjects who used the Reading Focus Cards read 7.2 more correct words per minute. Three of the nine participants met the learning goal of increasing correct words per minute read by 25 words. This reading comprehension goal was measured by the STAR Reading Assessment (Renaissance Learning, 2010). Participants increased their comprehension level by twenty-nine hundredths (.29). This data indicated that the learning goal was met by two subjects; the other seven participants did not meet the learning goal. Increasing decoding skills by one grade level was measured by the San Diego Quick informal reading assessment (Scholastic, 2002). All subjects, both control and the experimental group advanced at least one grade level as assessed by the San Diego Quick informal reading assessment (Scholastic, 2002). The researcher concluded that the third learning goal was not appropriately established.

Introduction and Literature Review

Educators are faced with students who struggle to read every day. While considerable emphasis has been placed on learning to read during the past few decades, there has been increased recognition that many older students demonstrate reading difficulties that significantly affect their reading to learn and reading for pleasure (Vaughn et al., 2009). Consequently, the students who were already struggling to read were likely to continue that struggle through high school. Many programs, initiatives, and strategies have been implemented into classrooms to help the struggling reader. Often times in the high school setting, there is no time in the day to give specialized reading instruction to students in the general education classroom. However, students eligible for special education can access self contained reading classes to meet their needs in a resource setting. Reading is a lifelong skill that is necessary to be productive in our society. Reading is one of the signature accomplishments of childhood; a skill that is necessary for success in school and throughout life (Reschly, 2010). Students who have low reading skills are at risk for dropping out of school, incarceration, unemployment, and are less likely to continue with post-secondary education.

Vaughn, et al. (2009) suggest prevention of reading difficulties is ideal, many students have either untreated or persistent reading difficulties that continue into the secondary grades. Archer, Gleason and Vachon (2003) noted that many secondary students' reading levels range from 2.5 to 5.0 grade levels. Clearly these secondary students would benefit from instruction that focused on increasing their reading level. According to Archer, Gleason and Vachon (2003) secondary students will unlikely make accelerated progress without intensive interventions, however, there is evidence that

secondary students may experience improved reading outcomes when provided explicit reading intervention with adequate time and intensity for reading instruction. Adolescent students with mild disabilities have the potential and capacity to increase those skills when they receive the specialized reading instruction stipulated on their IEP's (Sears & Kruhm, 2010). The expectation for students with disabilities and their peers are equal, acquire knowledge and respond to comprehension question (Sears & Kruhm, 2010).

Struggling readers may be reluctant to read aloud, have poor academic performance, dislike school, have poor attendance, increased misbehavior, and withdrawal from the classroom. Demos & Foshay (2010) contend that the most severe symptom of disengagement from school exhibits itself among school dropouts. Large numbers of students do not read at advanced or even proficient levels (Reschly, 2010). According to Reschly, (2010) promoting competence in reading is also critical to efforts to prevent high school dropout and to achieve the goal of ensuring that students complete school with the academic skills necessary to survive and thrive in society. Students who do not make progress are not able to keep pace with their peers and will in turn, effect engagement and motivation. Reschly (2010) found that difficulty with reading is one of the principal reasons students are referred to special education. It is estimated that 80% of students with learning disabilities receive services for reading disabilities, however, it is not uncommon for students in other high-incident disability categories to also have difficulties with reading (Reschly, 2010). There is evidence to suggest that a significant number of reading difficulties are preventable (Reschley,2010). Torgesen (2000) estimated that as many as 50% of children who are

at risk for reading failure can be brought to normal levels of performance following effective early reading instruction and interventions.

Ming & Duke (2010) imply that early failure is highly predictive of latter failure. Students who do not read fluently do not become good readers. In addition, students with inadequate fluency are likely to avoid reading because of fear of failure and negative attitudes. Students who have less exposure to ideas and vocabulary in books, may lose academic ground, causing them to be twice disadvantaged (Morgan, Farkas, & Hible, 2008). According to Brunner (1993), the frustration that results from reading failure may lead to delinquent behavior. He conducted a national survey of reading programs for incarcerated juveniles and found that 89% of the teachers that responded, reported students who required remediation in reading skills. Foley (2001) found on average, the reading levels of incarcerated youths were two years below those of their non-delinquent peers. Lower reading levels seem to be common among youths at risk and those involved in the juvenile justice system. Christle and Yell (2008) suggest numerous internal and external factors predict delinquency. There is a strong relation between academic failure, particularly in reading difficulties and delinquency. Poor academic skills, particularly in reading, do not directly cause delinquency and incarceration; yet youths with poor academic skills are disproportionately found in the criminal justice system (Christle and Yell, 2008).

Educators are continually implementing new strategies to keep students engaged and active in their learning. Student interviews by McCray, Vaughn, & La Vonne, (2001) revealed that students are embarrassed by their low reading skill and would be highly interested in learning to read if the reading intervention actually worked. As students

become engaged, they experience greater contextual support, further increasing their engagement (Reschly, 2010). Reschley (2010) indicates that reading is particularly salient- or even *the key*- academic skill in the cycle of engagement and withdrawal. Reading skills are essential for promoting engagement and successful school completion.

Currently, reading interventions with secondary students focus on closing the gap between actual reading level and grade-level expectations, by accelerating the student's progress in reading fluency, decoding, and comprehension. This process requires intense intervention in a small group setting. Vaughn et al. (2009) suggest that this is an acceptable strategy for researchers. This process becomes challenging for secondary teachers and principals to find time to provide remedial instruction with students that already dedicate a fair amount of time to meet state standards in all content areas. Furthermore, parents and students do not want to be deprived of all opportunities for school engagement on activities such as art, music, athletics, and band (Vaughn et al. 2009).

There are many products and programs that suggest they will increase reading skills. The researcher will test a product known as the Reading Focus Cards, a product made by Brennan Innovators LLC. (Brennan, 2010). The purpose of the study is to determine if Reading Focus Cards will significantly increase reading fluency and comprehension in secondary students with disabilities. The Reading Focus card is an inexpensive tool that could benefit individuals challenged with tracking and focusing on text. The Reading Focus Cards are designed for any age student and have been tested with elementary students and the results have had a positive impact on students

reading skills. Secondary students are willing to try strategies and tools if they work, therefore the researcher with the consent of students in the study, parents, and administrators are willing to test the Reading Focus Cards. If the Reading Focus Cards prove to be successful, this would be a tool for any educator to consider using within any classroom. Reading Focus Cards, coupled with intensive reading interventions, could help students with a wide array of disabilities achieve higher reading fluency rates and comprehension.

Consent was given to the researcher from the high school administrator. The researcher scheduled a meeting with the administrator and discussed the research project. The administrator had questions regarding any changes to the reading curriculum. The researcher assured that the curriculum would remain the same and all class activities would be the same for both the test and control group. The administrator then discussed privacy issues, the researcher responded that all students would have a code number that will be referenced in the project and no names or identifiable information will be released in the study. The researcher also presented a certificate of completion from the National Institute of Health requirements for conducting research. The building administrator requested a letter of intent and purpose from the researcher and professor of the researcher; see Appendix A. After obtaining the letter, the researcher signed an agreement to abide by all board policies set forth. The building administrator granted permission for the research project and requested a copy of the project when complete. The researcher obtained consent for participants and parents by a consent form sent home with students; see Appendix B. The consent form

contained general information about the study. The researcher had a conversation with the participants in the study and discussed the purpose of the research.

Setting and Subjects

This study will take place at a rural high school located in central Missouri. Enrollment is slightly increasing every year within this school district. During 2009, a total of 1,272 students were enrolled at the high school (Department of Elementary and Secondary Education, 2010). The enrollment data collected from the Department of Elementary and Secondary Education indicated that 0.5% of students were Asian, 6.0% Black, 7.9% Hispanic, 0.2% Indian, and 85.5% were White. This school is located in a low-income community, therefore 48.8% qualify for free or reduced lunch program (Department of Elementary and Secondary Education, 2010).

In July of 2009, where the study takes place, the population was 21,151 (City – Data, 2009). The average mean household income is \$34,547, which was below the state average by 26%. According to City-Data (2009), 75% of residents over the age of 25 have earned a high school degree, 14% have earned a bachelor's degree, 5% have earned a graduate or professional degree, and 5.8% of residents are unemployed. The top four occupations for males within this community are: production occupations including supervisors, metal workers and plastic workers, electrical equipment machines, and laborers (City-Data, 2009). The top four occupations for females within this community are: assemblers and fabricators, secretaries and administrative assistants, other production occupations, and teachers (City-Data, 2009). This data gives an overall view of the population of this rural community.

According to Missouri Department of Elementary and Secondary Education (2010), this school in 2009 met the No Child Left Behind- Adequate Yearly Progress in the areas of Communication Arts and Mathematics. This is a tremendous achievement

from previous years. The previous year had revealed a higher dropout rate and lower graduation rates as a reason for not making adequate yearly progress.

The students involved in this study are 15 to 18 years old in 10th, 11th, or 12th grade, and enrolled in Reward Reading. This reading class is a remedial class for students with various disabilities, who are currently receiving special education services. All students involved have an Individual Education Plan and their reading test scores show difficulty in reading. The students have a wide array of disabilities that include cognitive delays, learning disabilities, and other health impairments that affect their ability to read. The reading levels of these students range from 1st grade through grade level. Many of the students are not independent readers; they cannot comprehend what they have read. However, if the material is read aloud, they have much greater success in comprehension. The classroom itself, where the study takes place, is generally a good environment for learning. The room is small, seats up to 15 students and is free from most distractions due to the design of the new building. There is not a window for natural light and the walls are white, except for one red wall. The room is located in the lower level of the school and is in a less traveled hallway.

Many factors are related to classroom learning and environment. Discipline referrals have a great impact on classroom learning. There was a significant drop in referrals to administration during the 2009 school year. Attendance rates have attributed to classroom learning, as well. This community has a growing number of Hispanic migrant workers from Mexico to support the growing poultry industry. These students typically have lower attendance and return to Mexico for a month during the winter break. This factor has contributed to the attendance rate decrease. The attendance

rate in 2009 was 92% reported by the Department of Elementary and Secondary Education. During the 2008-2009 school year, administration at the high school changed as well. With this change came the implementation of Marzano's Instructional Strategies, common assessment testing among core classes, common planning time for core teachers, implementation of smaller learning communities, and the willingness of the administrators to increase technology and resources for teachers. In addition, a new high school was built, and classes began in the new building the 2009-2010 school year. The new building naturally spaced the students apart since it was much larger than the previous building, this could be one factor in decreasing office referrals. The majority of the community is very supportive of the new building. During 2009, the school implemented the Check and Connect program, which is designed to help keep teachers abreast of student's grades, attendance, discipline, and credit achievement. The 2010 school wide focus is to improve reading comprehension by reinforcing process standards and help struggling readers with vocabulary development and comprehension skills. There have been many changes to the school district in the past two years that have greatly impacted student learning; and the outcome has been great thus far.

Most of the students require more than one method of learning. Most are visual/auditory learners, so they require the verbal as well as the written text to be involved in everyday reading. Several students are tactile learners who learn best when they can decode words by using a pencil to break the words down into prefixes, suffixes, and vowel combinations. Often times these students learn best by practicing on the whiteboard using several different markers to differentiate between all of the

word parts. The researcher believes that adding the Reading Focus Cards (Brennan, 2010) would benefit the tactile learner by keeping their hands in motion during reading. Verbal repetition of the prefixes, suffixes, and vowel combinations are needed daily for the students in this class. This creates the long-term decoding skills necessary before comprehension. When answering comprehension passages, the researcher has had success if the students are able to locate and highlight the areas of importance, such as subtitles and vocabulary words.

The students involved are eager and willing to test the Reading Focus Cards (Brennan, 2010). The majorities of the students are aware of their delays in reading and are willing to find new strategies to improve their reading.

Learning Goals and Alignment with Standards

The purpose of this research project is to discover if Reading Focus Cards will impact students reading fluency and reading comprehension. Learning goals have been developed to identify the specific areas of concentration for students participating in the research project. The three learning goals are:

1. Students will increase their reading fluency by 25 correct words per minute while reading passages at their instructional reading level.
2. Students will increase their reading comprehension scores by one grade level by answering comprehension questions correctly.
3. Students will increase their decoding skills to problem solve unknown words by one grade level.

The first learning goal is: Students will increase their reading fluency by 25 correct words per minute while reading passages at their instructional level. This goal is aligned to the Missouri state standards, in the area Communication Arts. The specific *Grade Level Expectation CA 2, 3, 1.5* is to “Read grade-level instructional text with fluency: accuracy, comprehension, appropriate expression and adjusting reading rate to difficulty and type of text.” (Missouri Department of Elementary and Secondary Education, 2008). This learning goal is designed to help students increase their reading rate with various types of reading material. The students participating in this study typically have a reading rate two or more grade equivalencies below the actual grade they are in. Several students in the study read syllable by syllable and exhibit difficulty blending the word together. Other students lose their place while reading,

skipping lines of the text. The Reading Focus Cards have a colored window that will show one line of text at a time, so the student will move the card down the page while reading aloud or silently. This should increase the amount of correct words per minute the students are reading by keeping them focused on only one line of text at a time.

This goal will be measured by timed readings, how many correct words per minute the student is able to read at their instructional reading level. All of the students in the study are receiving special education services in the area of reading; therefore, this goal is appropriate for the study and the student's needs.

The second learning goal is: Students will increase their reading comprehension scores by one grade level by answering comprehension questions correctly. This goal is aligned to the Missouri state standards, in the area of Communication Arts. The specific *Grade Level Expectation CA 2, 3, 1.5, 1.6, 3.5* is "Apply post-reading skills to demonstrate comprehension of text by answer basic comprehension questions, identify and explain the relationship between the main idea and supporting details, make predictions, question to clarify, reflect, draw conclusions, analyze, paraphrase, and summarize." (Missouri Department of Elementary and Secondary Education, 2008). This learning goal is designed to help students understand what they are reading and be able to convey that understanding. Most of the students in the study struggle to demonstrate their understanding of what they read. Often times the intended message of the author is not the message that the student receives. Students can recall basic facts fairly easily but exhibit difficulty in determining the main idea, making predictions, and analyze the passage that was read. The Reading Focus Cards will help the reader stay on task and follow along with the material being read; therefore, the researcher

predicts an increase in reading comprehension. This learning goal will be measured by the STAR Reading Assessment (Renaissance Learning, 2010).

The third learning goal is: Students will increase their decoding skills to problem solve unknown words by one grade level. This goal is aligned to the Missouri state standards, in the area of Communication Arts. The specific *Grade Level Expectations CA 2, 3, 1.6 and CA 2, 3, 1.5, 1.6* are “Apply decoding strategies to problem-solve unknown words when reading when needed” and “develop vocabulary through text, using roots and affixes, context clues and glossary, dictionary and thesaurus.” (Missouri Department of Elementary and Secondary Education, 2008). This learning goal is designed to help students break down words into prefixes, suffixes, and vowel combinations in order to pronounce the word. The students will learn a covert and overt strategy to break apart words. First, they will break the words down by circling prefixes, suffixes, and underline vowel combinations. In addition, the students orally review all of the sounds on a daily basis. In order to increase fluency, decoding skills must be addressed first. The researcher will continue with the current reading program that supports this goal; the Reading Focus Cards will be an aid in keeping students focused on the words during reading. This learning goal will be measured by an informal reading assessment.

The purpose of the three learning goals outlined above, is to increase student achievement in the area Communication Arts, specifically reading. All of the students in the study have a deficit in reading; therefore, the goals not only align to state standards as well as the students’ needs. The learning goals encompass three components of reading; fluency, comprehension, and decoding. Upon review of data collected through

this experiment, the researcher wants to determine the effectiveness of the use of Reading Focus Cards to determine if they significantly impact the reading fluency and comprehension.

Data Collection/Assessment Plan

To determine the effectiveness of the Reading Focus Cards on fluency and comprehension, the researcher will use informal reading assessments to measure the increase of reading fluency and comprehension outlined in the learning goals previously stated. The assessment plan consists of three assessments that will be used to determine if the learning objectives have been met. To establish baseline data, the researcher will conduct pre-tests that evaluate the students reading fluency and comprehension prior to introducing the Reading Focus Cards (Brennan, 2010). After the initial assessments, eleven selected students will begin to use the Reading Focus Cards (Brennan, 2010). The selected students will use the Reading Focus Cards during their daily reading class. The researcher will continually monitor the progress during the research period by administering the informal reading assessments and conclude the study with a post-test at the end of the research period. The scores will be analyzed to determine the rate of increase on reading fluency, decoding, and comprehension.

The first learning goal is: Students will increase their reading fluency by 25 correct words per minute while reading passages at their instructional level. This goal will be assessed by administering timed readings. The students will be given a reading passage, and the students will read the passage for exactly one minute. The number of words read will be counted, and then the number of words read incorrectly will be deducted from the total. The number of correct words per minute will be recorded and used for the data collection point. The initial timed reading will be conducted without the use of the Reading Focus Cards (Brennan, 2010). Then, the subsequent passages will be read using the Reading Focus Cards (Brennan, 2010). In order to ensure valid data,

this assessment will not have any modifications or accommodations. This assessment will be administered many times throughout the research period. This assessment will be reported during the research period, once as a pre-test and once as a post-test at the end of the research period.

The second learning goal is: Students will increase their reading comprehension scores by one grade level by answering comprehension questions correctly. This learning goal will be measured by the STAR Reading Assessment (Renaissance Learning, 2010). The STAR Reading Assessment is a reading assessment that determines reading placement level and determines reading progress throughout the year (Renaissance Learning, 2010). The STAR Reading Assessment consists of short reading passages and comprehension questions. Students will independently read the passages, and then answer comprehension questions about the passages they have read. For the purpose of this study, the researcher will use grade equivalent scores collected from this assessment. Grade equivalency scores represent how a student's test performance compares with that of other students nationally (Renaissance Learning, 2010). According to Renaissance Learning, if a 5th-grade student has a GE of 7.6, his or her score is equal to that of a typical 7th grader after the sixth month of the school year. This score does not necessarily mean that the student is capable of reading 7th-grade material. It only indicates that his or her reading skills are well above average for his or her grade level. In order to ensure valid data, this assessment will not have any modifications or accommodations. This assessment will be administered three times throughout the research period, once as a pre-test, once as progress monitoring, and once as a post-test at the end of the research period.

The third learning goal is: Students will increase their decoding skills to problem solve unknown words by one grade level. This learning goal will be measured by the San Diego Quick informal reading assessment (Scholastic, 2002). The San Diego Quick assessment is a reading level screening tool which requires students to accurately pronounce words (Scholastic, 2002). Students will decode/pronounce words from multiple lists until directed to stop. From that list the researcher can determine the student's independent reading level, instructional reading level and frustration level. For the purposes of this study, the student's instructional reading level will be collected and reported. The instructional reading level is the grade level at which a student is at least 80% proficient at recognizing words and comprehending reading material with assistance (Renaissance Learning, 2010). In order to ensure valid data, this assessment will not have any modifications or accommodations. This assessment will be administered three times throughout the research period, once as a pre-test, once as progress monitoring, and once as a post-test at the end of the research period.

The researcher has identified several changes that may occur during the research period. Students included in the study may move out of the district during the research period. In the event a student moves, the researcher will exclude the student from the study. The rationale for exclusion is there would not be sufficient data to determine if Reading Focus Cards have a significant impact on reading fluency and comprehension (Brennan, 2010). Another change the researcher may encounter is a student may no longer wish to participate in the study. In such event, the researcher will allow the student to discontinue with the use of the Reading Focus Card and exclude the student from the study (Brennan, 2010). The rationale for exclusion is there

would not be sufficient data to determine the effectiveness of the Reading Focus Cards (Brennan, 2010). In the event that that a student would be absent on days of the assessment, the researcher will test the student the next class period upon the students return to school.

Method / Design for Instruction

The researcher will introduce the Reading Focus Cards to the subjects, who are enrolled in a remedial reading special education class. The subjects in the study will participate in two sections of Rewards throughout the research period. During the first session, the Reading Focus Cards will be introduced during lesson ten. This is the midpoint of the first Rewards session.

Rewards is a specialized reading program designed to teach secondary students a flexible strategy for decoding multisyllabic words to increase oral and silent reading fluency (Archer, Gleason, & Vachon, 2005). The ultimate goal of reading instruction is comprehension. Rewards recognizes that word recognition is the pathway to reading comprehension (Archer, Gleason, & Vachon, 2005). Thus, the first section of Rewards is primarily dedicated to word recognition and decoding skills. The Rewards program identifies several learning goals for students in the program. According to Archer, Gleason and Vachon (2005), as a result of participation in Rewards Reading, students will:

1. Decode previously unknown multisyllabic words containing two to eight word parts.
2. Accurately read more multisyllabic words in sentences.
3. Accurately read more multisyllabic words found in science, social studies, and other classroom materials.
4. Read content area passages not only accurately but fluently.
5. Experience increased comprehension as their accuracy and fluency increase.
6. Have more confidence in their reading ability. (p. 1)

Rewards includes many different strategies for students to increase their decoding skills. Each Reward lesson is divided into ten activities; the activities are listed in order (Archer, Gleason, & Vachon, 2005, p. 9-15):

a. Oral Activity- Blending word parts

The researcher says a word separating the word into word parts, pausing between each work part (e.g. *re con struct*). The students respond by orally saying the word quickly. This blending skill activity models what students experience when sounding out words.

b. Vowel Combinations

Students will orally review the vowel combinations previously introduced in the first 10 lessons (e.g., ai, oi, or, ou, and ay). The goal of the repeated practice is instant recognition, automaticity, and pronunciation of the vowels. Many students at the secondary level can identify consonant sounds, but struggling readers have not mastered the sounds of digraph and diphthongs. Rewards introduce the most common and high frequency vowel combinations. It is then reviewed in all subsequent lessons.

c. Vowel Conversions

Students will participate by reciting short and long vowel sounds for the letters a, i, o, e, and u. Rewards refer to them as letter sounds (short) and letter name (long). When student see these letters, they will be instructed to try the letter sound first, if it does not make a real word, then try the letter name.

d. Reading Parts of Real Words

Students will read a list of word parts orally as a class. These word parts are often found in complex multisyllabic words (e.g., nay, cur, turb, plore, duce, and plaint).

e. Underlining Vowels in Words

Students will locate and underline the vowel grapheme within words (e.g., streambed). Then the researcher segments the words into word parts, students say the parts, and then the whole word. Using guided practice, the students will complete approximately 12 words in the word list.

f. Pre-fixes and Suffixes

Students will listen to the pronunciation of the prefixes and suffixes, modeled by the researcher. The students will then orally recite the newly introduced prefixes and suffixes, along with the ones previously introduced (e.g., ab, ad, re, de, dis, and mis).

g. Circling prefixes and suffixes

Students will then be given a word list and they will identify and circle the prefixes and suffixes (e.g., unpredictable). Then students will read the word parts and then put the parts together to say the whole word.

h. Spelling Dictation

The researcher dictates a lesson word; the students say the parts in the word, and then they write the word.

i. Sentence Reading

Using the Reading Focus Cards, student will align the card with the sentences and read the sentences orally. The sentences will include words previously introduced in prior activities.

j. Passage Preparation and Passage Reading

Prior to passage reading, the researcher will tell students the difficult words in the reading passage. Then will lead students to use the rewards strategy to decode other difficult words. The researcher will also define the words in the word list. Once completed, students will take turns will orally reading the passage using the Reading Focus Cards. After reading the passage, timed readings will be administered.

Reward Plus is the second session that the participants in the study will complete. Rewards Plus is designed for students who successfully complete the first session of Rewards Reading. Rewards Plus continues decoding and fluency practice, with greater focus on vocabulary and comprehension (Archer, Gleason, & Vachon, 2005). The daily lessons include five activities; the activities are listed in order (Archer, Gleason, & Vachon, 2005, p. 15-17):

a. Vocabulary

To increase students' decoding, fluency, and comprehension the most difficult words are taught before the passages are read. Students use the decoding strategy to pronounce the words and the definition will be presented. A five-question quiz is given, to demonstrate student understanding.

b. Spelling

The researcher dictates a lesson word; the students say the parts in the word, and then they write the word.

c. Background Knowledge

A background knowledge paragraph will be presented before each reading passage. The researcher may choose to read it aloud or have students research it together.

d. Passage Reading

In small groups, students will take turns reading the passage aloud, using the Reading Focus Cards. After reading the passage, timed readings will be administered.

e. Comprehension

The students will be presented four multiple choice questions about the passage. The questions address vocabulary, main idea, and cause and effect.

Rewards Reading is an interactive reading program that includes many different instructional strategies. Students are allowed to work in small groups, participate in guided practice, and independently work. The majority of the oral activities are modeled by the researcher. Rewards Reading has a frequent change of activities to keep students engaged.

Instructional Decision Making

There is a direct correlation between Reading Focus Cards and significantly increasing reading fluency and comprehension in secondary students with disabilities. The researcher was mindful to hold all testing variables constant throughout the research period. The researcher and subjects experienced several changes throughout the research period.

The beginning of the second semester two new students joined the classroom in which the study took place. The students transitioned into the classroom well without significant changes in actions and attitudes from the other students. The new students were excluded from this study. Since the new students have not participated in Reading Rewards class before, the researcher spent two additional weeks reviewing material from session one before starting session two. The researcher chose to review material from session one for multiple reasons. First, the new additions to the classroom needed some exposure to session one before continuing to session two. Second, the research period included 10 missed school days, three delayed starts, and two early-outs due to adverse weather conditions. In addition, the researcher extended the research period by two weeks, making the research period 16 weeks. One subject in the study was placed on homebound instruction; therefore, this subject was excluded from the study.

Various types of instructional strategies were utilized within each lesson. During the first session, the researcher modeled the correct pronunciation of prefixes, suffixes and vowel combinations. The subjects orally recited B-D (noted in chapter 5) sections of the lesson. After one week of modeling, the researcher felt modeling of the sounds was

no longer needed. The subjects responded appropriately, on occasion corrections were necessary. During the oral reading of the passage in session one, the researcher pronounced unfamiliar words, after four weeks of modeling the researcher began to let students try to sound out the words. The researcher felt that this step was to increase subject's familiarity to unknown words.

After the prolonged winter break and multiple snow days, the researcher noticed student regression in reading correct words per minute during timed readings. The regression was found in 83% of the participants. This prompted the researcher to provide extra practice for subjects to regain their prior fluency levels. The researcher provided additional fluency practice by increasing the frequency of passage readings. First, subjects would be paired with another student and would read the entire passage. The students then looked back at their prior timed reading and set goals for the current timed reading. The subjects took turns reading the passage aloud for one minute; correct words per minute were recorded. All of the subjects using the Reading Focus Cards experienced success in raising their timed reading scores (Brennan, 2010). The subjects graphed their timed reading scores and were able to look at their progression since the start of the school year. This activity promoted a cooperative learning environment and subject engagement was high during this activity. This activity supported the first learning goal: Students will increase their reading fluency by 25 correct words per minute while reading passages at their instructional level.

During the second session, the researcher and subjects experienced one notable change within the classroom. The addition of an LCD mounted projector and Mobi mobile interactive whiteboard, increased the technological capability of the classroom

(CIM Technology Solution, 2011). The Mobi mobile interactive whiteboard does more than a traditional interactive whiteboard (CIM Technology Solution, 2011). Mobi is the first mobile interactive whiteboard designed to support student-centered active learning and give educators the mobility and flexibility to manage classes and deliver engaging lessons from anywhere in the room (CIM Technology Solution, 2011). The Mobi Workspace software allows educators to write, draw, insert images, highlight, interact with, and annotate over instructional content projected onto any surface (CIM Technology Solution, 2011). The researcher used this technology to increase student engagement with learning goal two: Students will increase their reading comprehension scores by one grade level by answering comprehension questions correctly. With this tool the researcher was able to project the reading passages and questions. The students would then highlight the parts of the passage that supported the correct answers. The participants also practiced the process of answering comprehension questions by reading the entire question, highlight or underline the key words of the question, reading all of the possible answers; and cross out any answers they know are incorrect. This activity was done as a class, modeled by the researcher. The subjects then practiced this process independently using interactive Mobi system (CIM Technology Solution, 2011). The researcher also used this tool to model how to annotate paragraphs during the reading. The main focus was questioning and summarizing. The subjects then made their own annotations on their paper. These activities increased student engagement and overall comprehension of the material read. The LCD projector was also used to bring up video clips, audio clips and pictures. The researcher was able to bring the passage to life by including visual

stimuli. The researcher feels the addition of this tool coupled with the Reading Focus Cards can implement more highly engaging lessons from anywhere in the room and allow students to participate more, therefore, increasing comprehension (Brennan, 2010).

Results / Analysis of Individual Learning

The premise of this study was that secondary students with disabilities would significantly increase their reading fluency and comprehension by using Reading Focus Cards. The researcher measured three learning goals, with three different assessment tools. In addition to assessing subjects who used the Reading Focus Cards, the researcher also assessed a control group who did not participate in using the Reading Focus Cards. All averages reported are calculated by using the mean average. Data from both the control and variable groups are noted below.

The first learning goal was: Students will increase their reading fluency by 25 correct words per minute while reading passages at their instructional level. This goal was assessed by administering timed readings. Table 1.1 indicates the average increase in correct words per minute was 22.3. Therefore, the first learning goal was not met. However, three of the nine subjects did meet the learning goal of increasing their reading fluency by 25 correct words per minute. Table 1.2 indicates control group who did not use the Reading Focus Cards indicated average increase of 15.1 correct words per minute throughout the research period. On average, the subjects who used the Reading Focus Cards read 7.2 more correct words per minute. The timed readings were considered valid and reliable. The researcher has been trained in administering timed readings from various reading workshops. The researcher was mindful of keeping assessment variables the same and was able to provide a consistent method of collecting data from individual participants. The data displays predictive validity and it is assumed the data could be duplicated in future studies.

Table 1.1 Correct Words Per Minute -Timed Reading Scores with Reading Focus Cards

Subject ID	Pre-Test CWPM	Post Test CWPM	Change in CWPM
M.0.1	136	160	+24
W.0.2	125	141	+16
M.0.3	79	97	+18
R.0.4	79	90	+11
R.0.5	61	68	+7
H.0.6	123	169	+46
C.0.7	104	136	+32
L.0.8	74	103	+29
C.0.9	176	194	+18
Average	106.3	128.6	+22.3

Table 1.2 Correct Words Per Minute - Timed Reading Scores without Reading Focus Cards

Subject ID	Pre-Test CWPM	Post Test CWPM	Change in CWPM
P.1.1	127	147	+20
W.1.3	131	147	+20
A.1.4	152	181	+29
P.1.5	123	125	+2
Q.1.6	169	184	+15
W.1.7	103	116	+13
L.1.8	79	86	+7
Average	126.2	140	+15.1

The second learning goal was: Students will increase their reading comprehension scores by one grade level by answering comprehension questions correctly. This learning goal was measured by the STAR Reading Assessment (Renaissance Learning, 2010). Table 2.1 indicates that participants increased their comprehension level by twenty-nine hundredths (.29). This data indicated that the learning goal was met by two subjects; the other seven participants did not meet the learning goal. In comparison, as seen in table 2.2, participants who did not use the reading focus card decreased reading comprehension skills by four tenths (.4). The

Star Reading Assessment was considered valid and reliable (Renaissance Learning, 2010). The Star Reading Assessment was approved by the Missouri Department of Elementary and Secondary Education, as a reading assessment instrument to make sound judgments about students' reading abilities (Missouri Department of Elementary and Secondary Education, 2000). Renaissance Learning provides criterion- and norm-referenced scores to demonstrate validity and reliability of the Star Reading Assessment (Renaissance Learning, 2001).

According to Renaissance Learning (2001), the reliability of STAR Reading was established with three reliability studies: test-retest ($n=2,095$), alternate forms ($n=4,551$), and generic reliability ($n=29,169$). The grade-level reliability estimates from all three studies are extremely high, ranging from 0.79 to 0.92 with most estimates greater than 0.85. An additional study ($n>12,000$) demonstrated the validity of STAR Reading by comparing students' scores on STAR Reading to their scores on other popular standardized tests. The high correlation (most are above 0.70) between STAR Reading scores and scores on other tests establishes both the validity of STAR Reading for measuring reading achievement and its ability to predict performance on other tests (Renaissance Learning, 2001).

Table 2.1 Star Reading Assessment Grade Equivalency – With Reading Focus Cards

Subject ID	Pre-Test GE	Post Test GE	Change in GE
M.0.1	5.7	6.8	+1.1
W.0.2	5.8	7.4	+1.6
M.0.3	6.1	6.3	+0.2
R.0.4	2.0	2.4	+0.4
R.0.5	1.5	1.8	+0.3
H.0.6	5.9	5.3	-0.6
C.0.7	7.2	6.8	-0.4
L.0.8	2.8	2.6	-0.2
C.0.9	6.1	6.3	+0.2
Average	4.78	5.07	+0.29

Table 2.2 Star Reading Assessment Grade Equivalency – Without Reading Focus Cards

Subject ID	Pre-Test GE	Post Test GE	Change in GE
P.1.1	1.8	2.7	+0.9
W.1.3	3.5	2.5	-1.0
A.1.4	4.5	4.5	No change
P.1.5	3.4	3.3	-0.1
Q.1.6	3.5	4.0	+0.5
W.1.7	3.4	3.6	+0.2
L.1.8	2.5	1.7	-0.8
Average	3.22	3.18	-0.4

The third learning goal was: Students will increase their decoding skills to problem solve unknown words by one grade level. This learning goal was measured by the San Diego Quick informal reading assessment (Scholastic, 2002). Table 3.1 indicates that all subjects advanced at least one grade level as assessed by the San Diego Quick informal reading assessment (Scholastic, 2002). All of the nine subjects increased their decoding skills by more than one grade level. Therefore, the third learning goal was met. In comparison, the subjects in the control group who did not use the reading focus cards increased decoding skills as well (Table 3.2). The subjects with

the Reading Focus Cards increased their decoding skills four tenths of a grade level above the control group. Since both the control and experimental group reached the goal, the data suggest that the third learning goal was not established appropriately and should have been set higher. The San Diego informal reading assessment was considered valid and reliable. This assessment was included in the list of approved reading assessment instruments, by the Missouri Department of Elementary and Secondary Education (Missouri Department of Elementary and Secondary Education, 2000). According to McKenna & Stahl (2009), “The San Diego Quick informal reading assessment has shown to provide reading-level estimates that are the same or similar to those provided by a more complex test” (p. 37). Therefore, evidence of concurrent validity has been established.

Table 3.1 San Diego Quick Informal Reading Assessment Results – With Reading Focus Cards

Subject ID	Pre-Test IRL	Post Test IRL	Change in IRL
M.0.1	7	11	+4
W.0.2	5	7	+2
M.0.3	6	11	+5
R.0.4	3	4	+1
R.0.5	2	3	+1
H.0.6	3	7	+4
C.0.7	5	6	+1
L.0.8	3	5	+2
C.0.9	7	10	+3
Average	4.5	7.1	+2.6

Table 3.2 San Diego Quick Informal Reading Assessment Results – Without Reading Focus Cards

Subject ID	Pre-Test IRL	Post Test IRL	Change in IRL
P.1.1	4	7	+3
W.1.3	4	6	+2
A.1.4	7	11	+4
P.1.5	4	7	+3
Q.1.6	7	8	+1
W.1.7	7	9	+2
L.1.8	4	5	+1
Average	5.3	7.5	+2.2

The researcher concludes the positive data warranted further exploration to determine if Reading Focus Cards have a significant impact on fluency and reading comprehension. The researcher determined that the sample population was too small and the research period was not adequate enough to show a significant difference. The researcher determined that several of the students benefited greatly from the Reading Focus Cards. The participants who had greater gains in assessments appeared to be the participants who are intrinsically motivated to increase their reading skills. These subjects seemed to have average or above average attendance rates. The subjects who had a greater number of absences had assessment scores, some that were below the initial pre-test. The researcher did not consider attendance when selecting participants in the study.

Conclusion / Reflection and Self-Evaluation

The purpose of this study was to determine if Reading Focus Cards significantly impacted reading fluency comprehension on students with disabilities. The data indicates that not all students showed a significant increase, however multiple subjects did have a significant increase in all three areas. The data also indicates that fluency was the area in which participants showed a significant gain. Although all of the learning goals were not met by the entire group of participants, several participants met and exceeded the learning goals.

The researcher chose participants on a volunteer basis. All participants with the exception of one have chosen to continue the use of the Reading Focus Card. The participants have had positive reactions to the Reading Focus Cards and many participants have commented on how easy it is to keep their place while reading. In addition, during passage reading, the researcher did notice a decrease in students asking, *Where are we?* That leads the researcher to conclude that participants were more likely to follow the reading while others were reading aloud. This would further increase the comprehension of the passage as well as increase student engagement. At the conclusion of the research period, several students requested to use their Reading Focus Cards in other classes. The researcher did notice that the participants who had the most gain, exhibited intrinsic motivation to learn and are constantly trying to improve their reading. The participants who did not make such gains, typically had a higher absence rate, lower grades, and did not display intrinsic motivation to learn. The researcher did not consider attendance, grades, or any other factors while selecting participants. The population used in this study was truly diverse.

Student learning was impacted by this study. Participants became more fluent readers and were able to keep their places while reading. The researcher noticed that participants who repeated words or skipped entire lines of the passage significantly decreased. The participants, as well as the researcher; were pleased with their progress. Participants felt more confidence while reading aloud and displayed accuracy with decoding words during and after the research period. The Reading Focus Cards are an addition to the current reading program. The addition of the Reading Focus Cards did not alter the Rewards Reading program. The researcher did not have to remind students to use the Reading Focus Cards, it just became a part of their daily routine.

The researcher suggests; if the research period was extended and the number of participants was increased, the results would most likely show a significant gain in all areas. If the research period was extended, the data would prove to be more reliable and valid. Even though the assessments that were given were valid and reliable, the results would be more accurate over a longer period.

After thoughtful reflection, the researcher would change how often the Star Reading Assessment was given. The researcher feels that the participants would have had significant gains in comprehension if the assessment was given more frequently. The researcher would also change the location of where the Star Reading Assessment was given. Since this assessment is a district wide assessment and was administered by the library staff, the researcher feels that the data would be more reliable and valid if the exam was given to the participants in the same computer lab at the same time. Additionally, the researcher would increase the third learning goal, to increase the

decoding skills by two grade levels. Both the control and experimental group met this goal; therefore, it was not adequately established. A more appropriate learning goal would have been for students to increase their decoding skills to problem solve unknown words by two grade levels.

The San Diego Quick Assessment and the timed readings were valuable assessments that the researcher would continue to use. The key to providing accurate data for the timed readings; was the researcher was trained in the area of administering the timed readings. The important aspect of administering timed readings is that the proctor must use an accurate time measurement tool and use the same symbols in marking the incorrect words. If done inconsistently, the results will vary. This research project insured consistency; there was only one proctor for the assessment. The proctor used the same time measurement tool and marking system. The researcher concludes if the Reading Focus Cards were used in all curriculum areas, the comprehension scores would have increased as well. The researcher predicts that the benefit to the students would be greater if they were introduced to students at a lower grade level.

The researcher will present the data to several groups of people. First, the data will be shown to the participants in the study. This will be a short presentation in the remedial reading class which the researcher teaches. Second, the research project will be shared with building administrators. The researcher hopes to gain administrator approval to purchase Reading Focus Cards in the future. The researcher will present the research topic to two groups of teachers, the high school Language Arts department and the Special Education department where the researcher is an instructor. The

researcher will urge other educators to consider the use of the reading focus cards with students that struggle with reading, especially students who easily lose their place while reading, and students who get off task while reading. These presentations will occur at a weekly collaboration meeting. The researcher will share this project with the Literacy Committee at the school which she teaches. The researcher is a member of the committee and welcomes the opportunity to share the findings as a way to help other teachers throughout the high school to find different ways to help struggling readers and promote literacy. The researcher will also share the findings of this project with the reading teacher at the junior high level. The researcher feels that the earlier the Reading Focus Cards are introduced to students, the increase in reading comprehension, fluency, and decoding would be greater.

The researcher plans to continue to use Reading Focus Cards in the classroom. The researcher saw the benefits the students received while using them. The researcher will particularly recommend the use of the Reading Focus Card to students who skip words or lines of passages when they read aloud. This product can also benefit students' fluency rates, especially the slower readers. In addition, the researcher will encourage students to use the Reading Focus Cards in all curriculum areas. The researcher predicts that the use in other classes will increase comprehension in those areas.

Although not all participants met all three learning goals, the researcher feels that this project was a success. The researcher will report her findings and ideally gain support for the continued use of the Reading Focus Cards.

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Appendix A

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

April Godwin is a graduate student at the University of Missouri St. Louis and will be required to complete a research project for EDREM 6040 — Teacher Research. She will conduct a variety of assessments of classroom practices and behavior, analyze the resulting data, and present and discuss findings with the class. She will write a research proposal, which will be the basis of her Capstone research project. The topic she has chosen is “Will Reading Focus cards significantly increase fluency rates and comprehension in secondary students with disabilities?” I have attached the course syllabus for your information.

I have had several other students from Sedalia Public Schools in this class. If you have any questions, please feel free to contact me.

Thank you,

Richard Staley, Ph.D.

University of Missouri – St. Louis

Appendix B

April Godwin
Special Services, Reading Instructor

September 9th, 2010

Dear Parents/Guardians,

I am your child's reading teacher at [REDACTED] as well as a graduate student at the University of Missouri St. Louis. I am conducting a research project on the effectiveness of Reading Focus Cards in my classroom. I request permission for your child to participate.

The study consists of using an additional tool called the Reading Focus Card within my reading class. I want to determine if the RFC's have significant impact on reading fluency and comprehension. The project will be explained in terms that your child can understand, and your child will participate only if he or she is willing to do so. Only I will have access to information from your child. At the conclusion of the study, children's responses will be reported as group results only. No personal identifiable information will be released in the study

Participation in this study is voluntary. Your decision whether or not to allow your child to participate will not affect the services normally provided to your child. Even if you give your permission for your child to participate, your child is free to refuse to participate.

Should you have any questions or desire further information, please call me or email me at [REDACTED] or [REDACTED].

Yours in Education,

April Godwin

Yes, my child may participate in the project outlined above.

No, my child will not participate in the project outlined above.

Parent/Guardian Signature: _____ Date: _____